

Serial No. 09/807,837
Art Unit: 1733

AMENDMENT TO THE CLAIMS

- 1-8. (Cancelled)
9. (Currently amended) A process for preparing a digital video disc comprising
- (a) providing at least two blanks;
 - (b) providing a hot melt adhesive comprising
 - (i) 10 weight percent to 40 weight percent of at least one thermoplastic elastomer,
 - (ii) 15 weight percent to 50 weight percent of at least one hydrocarbon resin,
 - (iii) 10 weight percent to 40 weight percent of at least one poly- α -olefin, and
 - (iv) 10 weight percent to 45 weight percent of at least one polar wax bearing functional groups having a molecular weight range of 4,000 to 80,000;
 - (c) applying the hot melt adhesive directly or indirectly onto at least one of the blanks; and
 - (d) bonding the two or more blanks together using the hot melt adhesive.
10. (Previously presented) The process of claim 9, wherein the thermoplastic elastomer comprises one or more styrene/diene block copolymers, styrene/isoprene/styrene copolymers or styrene/butadiene/styrene copolymers, or at least partly hydrogenated derivatives thereof, or mixtures thereof
11. (Previously presented) The process of claim 9, wherein the hydrocarbon resin comprises one or more cycloaliphatic hydrocarbon resins, aromatic

Serial No. 09/807,837

Art Unit: 1733

hydrocarbon resins, aliphatic hydrocarbon resins, aliphatic/aromatic hydrocarbon resins, or petroleum hydrocarbon resins, or hydrogenation products thereof, or mixtures thereof.

12. (Previously presented) The process of claim 9 wherein the poly- α -olefin comprises one or more atactic α -olefin copolymers or atactic α -olefin terpolymers, wherein the copolymers or terpolymers have a molecular weight range of 5,000 to 30,000 and comprise polymerized units of ethylene, propylene or 1-butene, or combinations thereof.

13. (Currently amended) The process of claim 9 wherein the polar wax comprises one or more functionalized polyolefins having ~~a molecular weight range of 4,000 to 80,000, and wherein the functionalized polyolefins comprise~~ polymerized units of ethylene or propylene, or combinations thereof, and are functionalized with at least one acrylic acid, methacrylic acid, C_{1-4} esters of acrylic acid or methacrylic acid, maleic acid, itaconic acid, fumaric acid, vinyl acetate, or carbon monoxide or mixtures thereof.

14. (Previously presented) The process of claim 13, wherein the functionalized polyolefins have a saponification or acid value of 2 to 50 mg KOH/g.

15. (Previously presented) The process of claim 9 wherein the hot melt adhesive further comprises one or more fillers, pigments, plasticizers, tackifying resins, antiagers, antioxidants, UV stabilizers or coupling agents, or combinations thereof.

16. (Previously presented) The process of claim 9 wherein the thermoplastic elastomer comprises one or more styrene/diene block copolymers,

Serial No. 09/807,837

Art Unit: 1733

styrene/isoprene/styrene copolymers or styrene/butadiene/styrene copolymers, or at least partly hydrogenated derivatives thereof, or mixtures thereof, wherein the hydrocarbon resin comprises one or more cycloaliphatic hydrocarbon resins, aromatic hydrocarbon resins, aliphatic hydrocarbon resins, aliphatic/aromatic hydrocarbon resins or petroleum hydrocarbon resins, or hydrogenation products thereof, or mixtures thereof, wherein the poly- α -olefin comprises one or more atactic α -olefin copolymers or atactic α -olefin terpolymers having a molecular weight range of 5,000 to 30,000 and comprising polymerized units of ethylene, propylene or 1-butene, or combinations thereof, and wherein the polar wax comprises one or more functionalized polyolefins having a molecular weight range of 4,000 to 80,000.

17. (Previously presented) The process of claim 16 wherein the hot melt adhesive further comprises one or more fillers, pigments, plasticizers, tackifying resins, antiagers, antioxidants, UV stabilizers, or coupling agents or combinations thereof.

18. (Previously presented) The process of claim 9 further comprising the steps of

(e) applying an information layer to at least one of the blanks, and

(f) coating the information layer with a light-reflecting layer, wherein the hot melt adhesive is applied to the blank after the blank is coated with the reflective layer.

19 (Previously presented) The process of claim 18 wherein an anti-corrosion layer is applied to the light reflecting layer prior to the application of the hot melt adhesive.

Serial No. 09/807,837

Art Unit: 1733

20. (Previously presented) The process of claim 18 further comprising applying a print layer to at least one of the blanks wherein the print layer comprises graphics or text, or combinations thereof.

21. (Previously presented) The process of claim 20 wherein the hot melt adhesive is also applied to the print layer.

22. (Previously presented) The process of claim 18 wherein the thermoplastic elastomer comprises one or more styrene/diene block copolymers, styrene/isoprene/styrene copolymers or styrene/butadiene/styrene copolymers, or at least partly hydrogenated derivatives thereof, or mixtures thereof, wherein the hydrocarbon resin comprises one or more cycloaliphatic hydrocarbon resins, aromatic hydrocarbon resins, aliphatic hydrocarbon resins, aliphatic/aromatic hydrocarbon resins, or petroleum hydrocarbon resins, or hydrogenation products thereof, or mixtures thereof, wherein the poly- α -olefin comprises one or more atactic α -olefin copolymers or atactic α -olefin terpolymers having a molecular weight range of 5,000 to 30,000 and comprising polymerized units of ethylene, propylene or 1-butene, or combinations thereof, and wherein the polar wax comprises one or more functionalized polyolefins having a molecular weight range of 4,000 to 80,000.

23. (Previously presented) A digital video disc prepared by the process of claim 9.

24. (Currently amended) A digital video disc comprising

- (a) at least two blanks, wherein each blank has an inner surface;
- (b) at least one information layer located on the inner surface of a first blank;
- (c) at least one light reflecting layer located on the information layer;

Serial No. 09/807,837

Art Unit: 1733

(d) at least one layer of hot melt adhesive located between the light reflecting layer of the first blank and a second blank, wherein the hot melt adhesive bonds the first and second blanks together and comprises

(i) 10 weight percent to 40 weight percent of at least one thermoplastic elastomer,

(ii) 15 weight percent to 50 weight percent of at least one hydrocarbon resin,

(iii) 10 weight percent to 40 weight percent of at least one poly- α -olefin, and

(iv) 10 weight percent to 45 weight percent of at least one polar wax bearing functional groups, having a molecular weight range of 4,000 to 80,000.

25. (Previously presented) The digital video disc of claim 24 wherein the second blank comprises a print layer located on the inner surface of the second blank, the print layer comprising graphics or text, or combinations thereof, and wherein the hot melt adhesive layer is located between the print layer of the second blank and the light reflecting layer of the first blank.

26. (Currently amended) The digital video disc of claim 25 wherein the thermoplastic elastomer comprises one or more styrene/diene block copolymers, styrene/isoprene/styrene copolymers or styrene/butadiene/styrene copolymers, or at least partly hydrogenated derivatives thereof, or mixtures thereof, wherein the hydrocarbon resin comprises one or more cycloaliphatic hydrocarbon resins, aromatic hydrocarbon resins, aliphatic hydrocarbon resins, aliphatic/aromatic hydrocarbon resins, or petroleum hydrocarbon resins, or hydrogenation products thereof, or mixtures thereof, wherein the poly- α -olefin comprises one or more atactic α -olefin copolymers or atactic α -olefin terpolymers having a molecular weight range of 5,000

Serial No. 09/807,837

Art Unit: 1733

to 30,000 and comprising polymerized units of ethylene, propylene or 1-butene, or combinations thereof, and wherein the polar wax comprises one or more functionalized polyolefins ~~having a molecular weight range of 4,000 to 80,000.~~

27. (Currently amended) The digital video disc of claim 24 wherein the thermoplastic elastomer comprises one or more styrene/diene block copolymers, styrene/isoprene/styrene copolymers or styrene/butadiene/styrene copolymers, or at least partly hydrogenated derivatives thereof, or mixtures thereof, wherein the hydrocarbon resin comprises one or more cycloaliphatic hydrocarbon resins, aromatic hydrocarbon resins, aliphatic hydrocarbon resins, aliphatic/aromatic hydrocarbon resins, or petroleum hydrocarbon resins, or hydrogenation products thereof, or mixtures thereof, wherein the poly- α -olefin comprises one or more atactic α -olefin copolymers or atactic α -olefin terpolymers having a molecular weight range of 5,000 to 30,000 and comprising polymerized units of ethylene, propylene or 1-butene, or combinations thereof, and wherein the polar wax comprises one or more functionalized polyolefins ~~having a molecular weight range of 4,000 to 80,000.~~